

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 11044 (1984): Acrylic Trimmers, Dental [MHD 8: Dentistry]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard

SPECIFICATION FOR ACRYLIC TRIMMERS, DENTAL

1. Scope — Specifies material, dimensions and other characteristics of acrylic trimmers which are predominantly used in dental laboratories.

2. Material

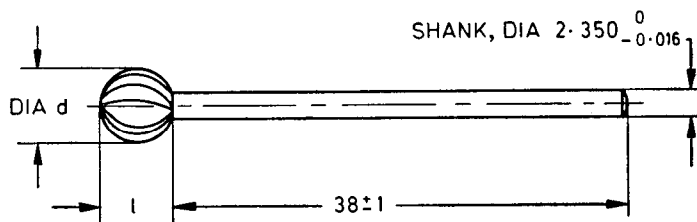
2.1 The working part of acrylic trimmers shall be made of tool steel conforming to designation XT87W6Mo5Cr4V2 or XT72W18Cr4V1 of IS : 7291-1981 'Specification for high speed tool-steels (first revision)', unless otherwise specified.

2.2 The shank shall be made of tool steel conforming to designation T85 of Schedule VI of IS : 1570-1961 'Schedules for wrought steels for general engineering purposes'. It shall be electroplated with nickel and chromium in accordance with Service Grade No. 1 of IS : 1068-1968 'Specification for electroplated coatings of nickel and chromium on iron and steel (first revision)'.

3. Dimensions and Number of Blades — The dimensions and number of blades shall be as specified in Fig. 1 to 9. (For designation of nominal sizes, see IS : 10307-1982 Nominal sizes and designation of working parts of burrs and cutters, dental). The symbols used for various dimensions are as given below:

d is the diameter of the working part, and

l is the length of the working part.



Nominal Size	d $+0.15$ -0.25	l ± 0.25	Number of Blades Min
040	4.00	3.70	8
050	5.00	4.70	10
060	6.00	5.80	12
070	7.00	6.80	14
080	8.00	7.80	16

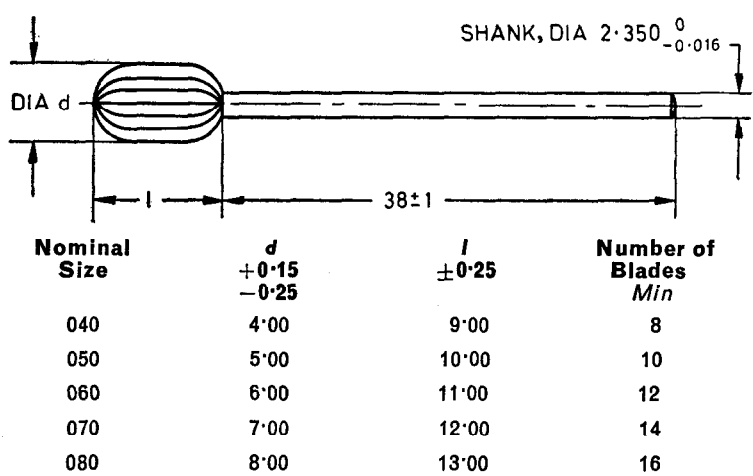
All dimensions in millimetres.

FIG. 1 ACRYLIC TRIMMER, ROUND HEAD (SPHERICAL)

4. Joint — The joint of the working part and shank of the acrylic trimmers shall be either butt-welded or press-fitted.

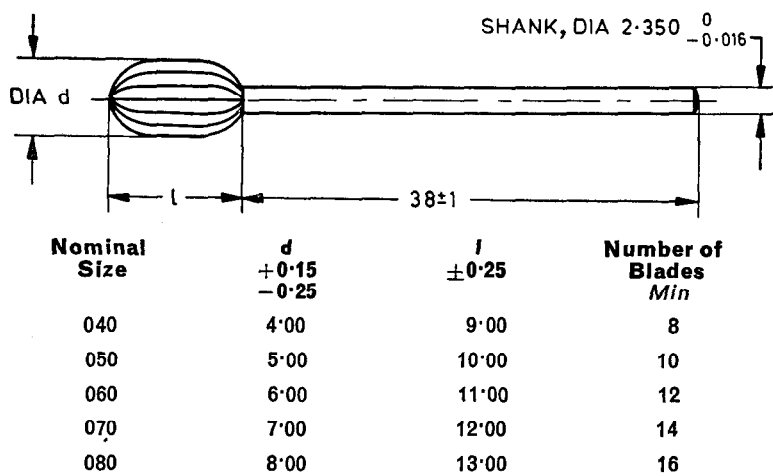
5. Heat Treatment — The acrylic trimmers shall be suitably hardened and tempered to give the following hardness:

- | | |
|-----------------|---------------|
| a) Working part | 780 to 900 HV |
| b) Shank | 275 to 325 HV |



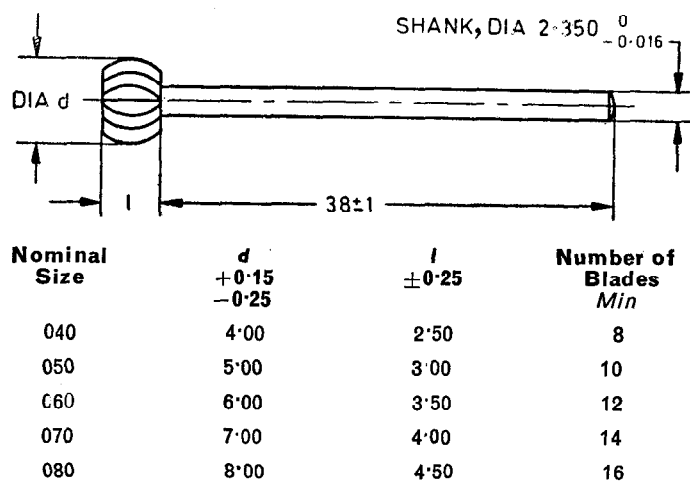
All dimensions in millimetres.

FIG. 2 ACRYLIC TRIMMER, BARREL



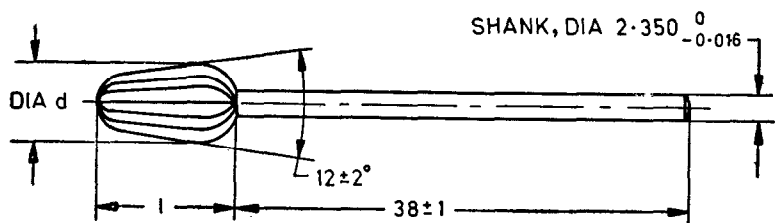
All dimensions in millimetres.

FIG. 3 ACRYLIC TRIMMER, EGG (LONGITUDINAL ELLIPSOID)



All dimensions in millimetres.

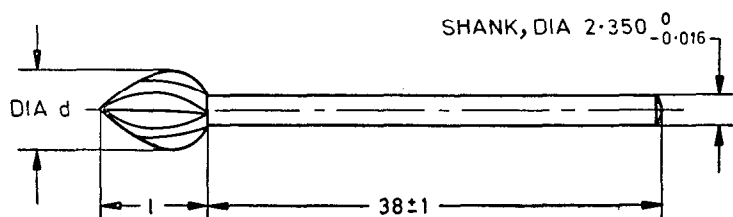
FIG. 4 ACRYLIC TRIMMER, OVAL (ELLIPSOIDAL)



Nominal Size	d $+0.15$ -0.25	l ± 0.25	Number of Blades Min
040	4.00	8.00	8
050	5.00	9.50	10
060	6.00	11.00	12
070	7.00	12.50	14
080	8.00	14.00	16

All dimensions in millimetres.

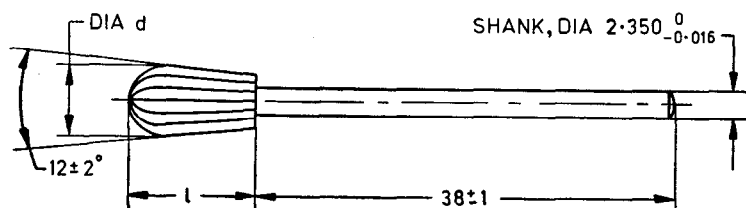
FIG. 5 ACRYLIC TRIMMER, BUD (OGIVO-HEMISPHERICAL)



Nominal Size	d $+0.15$ -0.25	l ± 0.25	Number of Blades Min
040	4.00	7.00	8
050	5.00	8.00	10
060	6.00	9.00	12
070	7.00	10.00	14
080	8.00	11.00	16

All dimensions in millimetres.

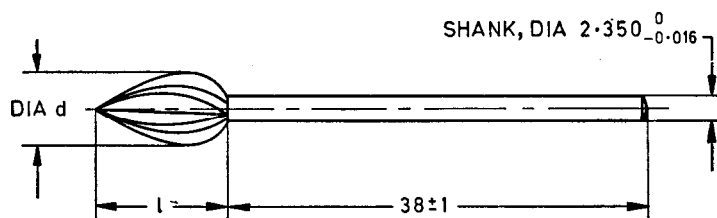
FIG. 6 ACRYLIC TRIMMER, BUD POINTED



Nominal Size	d $+0.15$ -0.25	l ± 0.25	Number of Blades Min
040	4.00	9.00	8
050	5.00	10.00	10
060	6.00	11.00	12
070	7.00	12.00	14
080	8.00	13.00	16

All dimensions in millimetres.

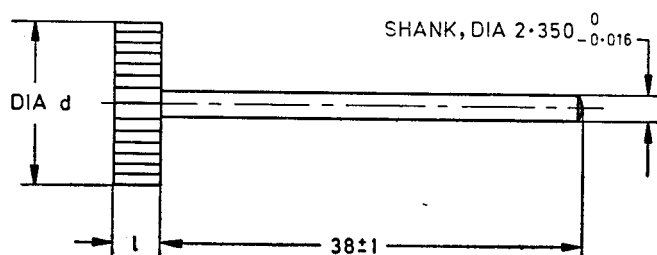
FIG. 7 ACRYLIC TRIMMER, PEAR (HEMISPHERICAL, INVERTED CONICAL)



Nominal Size	d + 0.15 - 0.25	l ± 0.25	Number of Blades Min
040	4.00	10.00	8
050	5.00	11.00	10
060	6.00	12.00	12
070	7.00	13.00	13
080	8.00	14.00	14

All dimensions in millimetres.

FIG. 8 ACRYLIC TRIMMER, FLAME (CYLINDRICAL WITH LONG OGIVAL END)



Nominal Size	d + 0.15 - 0.25	l ± 0.25	Number of Blades Min
100	10.00	3.50	18
120	12.00	3.50	22
140	14.00	4.00	26
160	16.00	4.00	30

All dimensions in millimetres.

FIG. 9 ACRYLIC TRIMMER, WHEEL

6. Test Method for Measuring Dimensions

6.1 Shank Diameter — The shank diameter shall be measured with tungsten carbide ring gauges checked regularly with mating plugs, air gauges or dial indicators (0.001 mm graduations).

Note — In the event of any dispute concerning the measured shank diameter, the referee method shall be the one using tungsten carbide ring gauges.

6.2 Diameter of Working Part — The diameter of working part shall be determined using the tungsten carbide ring gauges checked regularly with mating plugs, air gauges, dial indicator bore gauges (0.01 mm graduations) or manufacturer's gauges of demonstrated equal accuracy.

Note — In the event of any dispute concerning the measured diameter of the working part, the referee method shall be the one using tungsten carbide ring gauges.

6.3 Other Dimensions — The other dimensions shall be measured with appropriate gauges or calibrated blade-type micrometer calipers. The cone angle shall be measured with a tool maker's microscope.

7. Marking — Each acrylic trimmer shall be legibly and indelibly marked with its nominal size and manufacturer's name, initials or registered trade-mark.

7.1 ISI Certification Marking — Details available with the Indian Standards Institution.

8. Packing — Each instrument shall be wrapped in a wax paper and packed in a carton with soft packing material like expanded polystyrene. The carton shall bear the name, nominal size and shape of the instrument; manufacturer's name or registered trade-mark and the country of manufacture.

Alternatively, it may be packed as agreed to between the purchaser and the supplier.

EXPLANATORY NOTE

This standard is based on ISO/DIS/7787/1 'Dental rotary instruments — Cutters — Part I : Steel cutters', issued by the International Organization for Standardization.